

against further inoculations, nor do the sera of dogs, repeatedly injected with spirochetes, protect other dogs from the disease; such sera are likewise of no therapeutic value. Uhlenhuth and Mulzer were unable to cultivate the *spirocheta pallidum* from infected animals. With reference to transmission of the disease, it was found after intravenous injections of the spirochete, the organisms were able to penetrate the sound placenta within five minutes and could be demonstrated in the fetus. The injection of blood from individuals in the primary or secondary stage of lues, caused a specific orchitis in 78 per cent. of the cases; even the blood of persons having latent syphilis and showing a negative Wassermann reaction can be infectious. Uhlenhuth and Mulzer conclude therefore that lues is essentially a chronic septicemia.

Theory of the Wassermann Reaction.—**PRASNITZ and STEM** (*Zentralbl. f. Bakteriol.*, 1913, lxi, 545) in going over the subject of the Wassermann reaction it was found that both aqueous and alcoholic extracts of luetic livers gave complete complement fixation in the presence of luetic sera; alcoholic extracts were much more potent and reliable; alcoholic extracts of the residue from the syphilitic livers were inactive. It was found that intravenous injections, into dogs, of either of the above potent extracts would induce a positive Wassermann reaction in their sera; controls, with normal extracts were always negative. Since experimentally the production of an active antibody results from the introduction of a substance or substances soluble in alcohol, and probably of a lipoid nature, while on the other hand only proteids induce antigen production, it seems reasonably certain that the Wassermann reaction is not a true antigen-antibody process. The reaction is to be considered characteristic when positive, but not specific. Whether the lipoids in the reaction originate from the luetic tissue or from the spirochetes, remains to be seen.

The Blood Picture in Status Lymphaticus.—**SISS and STÖRK** (*Wien. med. Woch.*, 1913, lxi, 1123) give a report of 23 cases, diagnosed by reason of the following symptomatology: (1) Atypical arrangement of the hair; (2) abnormal length of the extremities; (3) scaphoid scapulae; (4) a wide pelvis in males, narrow in women; (5) adiposity of the reverse type, in the lower half of the body in males, upper half in females; (6) poor development of the breasts; (7) general glandular hyperplasia; (8) small but elongated heart associated with a strong apex beat and an accentuated aortic second sound; (9) low blood-pressure; (10) psychoneurotic manifestations; (11) vagotonia; (12) infantile type of epiglottis. The blood findings in such cases showed few deviations from the normal picture. Thus the red-blood corpuscles varied between 3,000,000 to 5,000,000, the hemoglobin being generally high. Contrary to a general belief the white cells are not consistently low-ranging in this series from 4300 to 10,000. As regards the various white cells, the neutrophilic leukocytes, large mononuclears, and transitionals are within normal limits; lymphocytes rarely exceed 2000 per c.c. but quite characteristic of them is their unusually abundant protoplasm. Eosinophiles are consistently low, whereas the abundance of blood platelets is a noteworthy feature. Functional tests of the activity of the bone-marrow, made by means of gelatin infections,

showed an increase in neutrophilic leukocytes considerably lower than normal; on the other hand the mononuclear elements not only failed to show the customary decrease, but in 4 cases were absolutely increased.

SURGERY

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Traumatic Epilepsy and Its Surgical Treatment.—MATTHIAE (*Deut. Zeitschr. f. Chir.*, 1913, cxxiii, 417) collected from the literature and studied 326 cases of traumatic epilepsy, which had been operated on. Of these 60 were of the general and 266 of the Jacksonian type. Favorable results (cure with permanent recovery or recovery lasting some years) were obtained in 96 cases, of which 81 were of the Jacksonian and 15 of the general type. The results were unfavorable (no influence, made worse, or death) in 81 cases, of which 59 were of the Jacksonian type and 22 general. The remaining cases were observed for too short a time or either the results or the time of observation were not given. The time of observation after which one can speak of a permanent cure, should be at least five years. In these 326 cases there were only 4 in which the attacks recurred after they had ceased for several years. In one they recurred after a cure of four years, in two others after five years and in the fourth after six years. The time of observation should be, therefore, at least five years. In all, 24 cases were followed for more than five years, of which 21 were of the Jacksonian and 3 of the general type. A cure (for under five years but one year at least) was obtained in 40 cases (Jacksonian 36, general 4). Improvement was obtained in 27 (Jacksonian 19, general 8). There was no improvement in 59 cases (Jacksonian 42, general 17). The condition was made worse, evidently from the operation itself, in 3 cases, and 19 died as the result of the operation (Jacksonian 16, general 3). Death was due to shock or collapse in 6 cases, meningitis in 5 cases, status epilepticus in 3 cases (one of which died as the result of tonic contraction of the diaphragm). In one case death was due to pleuropneumonia and secondary hemorrhage. The favorable cases were all observed at least one year, while in the failures the period of observation was sometimes less. According to experience up to the present time, improvement and cure may develop only a long time after operation, just as the improvement after operation may disappear again after a time.